Math 0361 Practice Test 1 Name:_____

Show ALL work in space provided and ***clearly mark final answer*** to receive any credit!

Simplify the expressions:

1. $5[5+5(7-2)]$

2. $\dfrac{3+6(8-5)}{4^2+2}$

Evaluate the expressions:

3. x^2-5y+x when $x=20$ and $y=6$

4. $\dfrac{x}{z}+3y$ if $x=6, y=3,$ and $z=2$.

Simplify:

5. $m-7m-3m+5$

6. $4(x+2)-(2x-7)$

7. Subtract $9x+10$ from $6x-10$	8. **Write the following phrase as an algebraic expression and simplify if possible.** Let x represent the unknown number. Triple a number, minus the sum of the number and three.

Solve the equations:

9. $x+2=4$	10. $-4(x+2)+5x=12$
11. $-9x=81$	12. $\frac{3}{7}x=-9$

Solve:

13. $8y + 3(y - 6) = 4(y + 1) - 2$

14. $\frac{2}{5}x + \frac{4}{5} = -\frac{4}{5}$

15. $0.7x - 1.6 = 0.5$

16. $\frac{7}{10}x - \frac{1}{5} = 4$

Using x as the unknown number, write the statement as an equation and then solve the equation for x:

17. Three times a number, minus 6, is equal to two times the number, plus 7.

18. A 42-inch board is to be cut into three pieces so that the second piece is twice as long as the first piece and the third piece is 4 times as long as the first piece. If x represents the length of the first piece, find the lengths of all three pieces.

19. A 17-foot piece of string is cut into two pieces so that the longer piece is 5 feet longer than twice the shorter piece. If the shorter piece is x feet long, find the lengths of both pieces.

20. The left and right page numbers of an open book are two consecutive integers whose sum is 455. Find these page numbers.

MATH0361 Practice Test 1 Answers:

1) 150

2) $\frac{7}{6}$

3) 390

4) 12

5) -9m+5

6) 2x+15

7) -3x-20

8) 2x-3

9) x = 2

10) x = 20

11) x = -9

12) x = -21

13) $y = \frac{20}{7}$

14) x = -4

15) x = 3

16) x = 6

17) x = 13

18) 6 in, 12 in, 24 in

19) 4 ft and 13 ft

20) 227 & 228